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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/045,049 | 01/15/2002 | Monika Oswald | 218230US0X | 2944 |
| 22850 | 7590 | 06/21/2005 | EXAMINER | |
| OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314. | | | STEIN, STEPHEN J | |
| | | ART UNIT | | PAPER NUMBER |
| | | | | 1775 |

DATE MAILED: 06/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | |
|------------------------------|------------------------|---------------------|
| Office Action Summary | Application No. | Applicant(s) |
| | 10/045,049 | OSWALD ET AL. |
| | Examiner | Art Unit |
| | Stephen J. Stein | 1775 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 25 March 2005.

2a) This action is **FINAL**. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 9-13 and 16-34 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) 21-30 is/are allowed.

6) Claim(s) 9-13, 16 and 17 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.

 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 3/25/05.

4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ .
5) Notice of Informal Patent Application (PTO-152)
6) Other: _____

DETAILED ACTION

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Priority

2. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Germany on December 22, 2001. It is noted, however, that applicant has not filed a certified copy of the German application as required by 35 U.S.C. 119(b).

Continued Examination Under 37 CFR 1.114

3. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on March 25, 2005 has been entered.

Claim Rejections - 35 USC § 102

4. Claims 9, 13, 16 and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by 3,629,666 (Yokozawa).

Yokozawa teaches a mixed layer of SiO₂ and TiO₂ which comprises 5-30% TiO₂ on semiconductor substrate (material which has a very low coefficient of expansion) wherein the raw materials are heated from 250° to 500° (sintered) to form an the film (col. 2). It is the examiner's position that since independent claim 9 recites that the layer is sintered, the raw material powder used to make sintered layer is no longer in it's initial powdered form and the final sintered product is the same that is disclosed in the prior art. Consequently, the claimed

BET surface area of the powder is merely part of the process of achieving the final sintered film and absent a showing of materially different final product, it does not provide a distinction of the prior art. Process limitations in product claims are generally not dispositive on patentability unless it is shown that the process limitations produce a materially different product. See MPEP §2113.

Claim Rejections - 35 USC § 103

5. Claims 10-12 rejected under 35 U.S.C. 103(a) as being unpatentable over Yokozawa as applied to claim 9 above.

Although Yokozawa fails to teach the specifically claimed thicknesses of the mixed oxide layer, absent a showing of criticality with respect to the claimed thickness (a result effective variable), it would have been obvious to one of ordinary skill in the art to optimize the thickness through routine experimentation. It has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

Allowable Subject Matter

6. Claims 21-30 are allowed over the prior art for reasons of record in the office action mailed October 25, 2005.

Response to Arguments

7. Applicant has amended independent claim 9 to change the limitation "thermal treatment" to "sintering treatment" make to arguments regarding the rejection over US 4,297,143 (Kleinshmit). First, applicants argue that the mixed oxide disclosed in US 4,297,143 (Kleinshmit) is not in the form of layer on a substrate, but rather either in the form of a free

flowing powder or in the form of insulated shaped article. Applicants make a second argument that the a materially different product is produced by the process limitations recited in claim 1, and that the disclosed process leads to inter-particle bonding which is neither taught nor suggested by the prior art. Applicants' arguments have been carefully considered. In view of applicants' first argument, the Kleinshmit reference has been withdrawn. Applicants' second argument is therefore moot.

New rejections have been made over newly cited art of record in view of applicants' amendment to the claims.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen Stein whose telephone number is 571-272-1544. The examiner can normally be reached on Monday through Friday from 8:30 a.m. to 5:00 p.m. If the attempts to reach the examiner are unsuccessful, the examiner's supervisor, Deborah Jones can be reached by dialing 571-272-1535. The official fax number is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

June 16, 2005


STEPHEN STEIN
PRIMARY EXAMINER